

Date: Fri, 22 Oct 93 04:31:01 PDT  
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>  
Errors-To: Ham-Homebrew-Errors@UCSD.Edu  
Reply-To: Ham-Homebrew@UCSD.Edu  
Precedence: Bulk  
Subject: Ham-Homebrew Digest V93 #80  
To: Ham-Homebrew

Ham-Homebrew Digest                      Fri, 22 Oct 93                      Volume 93 : Issue    80

Today's Topics:

    Need Louder PC Speaker for Code Practice.  
        SCA Decoder  
        Temp control soldering iron?  
    Transistor substitution question (3 msgs)

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>  
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: 21 Oct 93 18:39:02 GMT  
From: sdd.hp.com!col.hp.com!srngenprp!alanb@hplabs.hpl.hp.com  
Subject: Need Louder PC Speaker for Code Practice.  
To: ham-homebrew@ucsd.edu

Richard L Barnaby (rbarnaby@world.std.com) wrote:  
: I'd like to add a simple speaker to an IBM PC that is externally  
: controlled. Just an op-ap, a pot, and a speaker? Tap into the  
: pc's speaker "jack"?

If you use a good hi-fi speaker, you may not need any amplifier,  
because it would be much more efficient than the little 2" speaker  
in the PC.

AL N1AL

-----  
Date: Thu, 21 Oct 1993 06:22:23 GMT

From: swrinde!cs.utexas.edu!math.ohio-state.edu!howland.reston.ans.net!agate!  
news.ucdavis.edu!othello.ucdavis.edu!ez006683@network.ucsd.edu  
Subject: SCA Decoder  
To: ham-homebrew@ucsd.edu

Hi All,

There is a thread in r.r.a.misc regarding FM stations which transmit SCA programming. I am interested in building a decoder for SCA programming. I have two questions, first how do I build the basic decoder and second, what is the data format for SCA information services?

Thanks es 73

Dan

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*-----*
* Daniel D. Todd      Packet: KC6UUD@WA6RDH.#nocal.ca.usa      *
*                      Internet: DDTODD@ucdavis.edu             *
*                      Snail Mail: 1750 Hanover #102            *
*                      Davis CA 95616                          *
*-----*
*      I do not speak for the University of California....    *
*      and it sure as hell doesn't speak for me!!             *
*-----*
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Date: 21 Oct 93 11:16:44 EDT  
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!pipex!sunic!  
psinntp!psinntp!arrl.org@network.ucsd.edu  
Subject: Temp control soldering iron?  
To: ham-homebrew@ucsd.edu

As ARRL Handbook Editor, I would like to update the old standby soldering iron project to a newer approach.

Minimum approach: Place a light dimmer in series with the iron. Pros: cheap, easy. Cons: RFI noisy, only sets an approximate maximum temperature.

Maximum approach: Attach a thermocouple or RTD (resistance temperature detector) near the iron tip and feed temperature info back to control an SCR. Pros: professional quality control. Cons: Complex, expensive. Cost must be < \$100 for parts (I've seen bead thermocouples for \$17, RTDs for \$19).

Has anyone out there already done this? If so I might be interested in your project for the Handbook. Please respond to me by email.

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Date: Thu, 21 Oct 1993 04:35:51 GMT  
From: munnari.oz.au!bruce.cs.monash.edu.au!trlluna!titan!pcies4.trl.OZ.AU!  
drew@network.ucsd.edu  
Subject: Transistor substitution question  
To: ham-homebrew@ucsd.edu

In article <2a2r42\$fvi@klaava.Helsinki.FI> stickler@klaava.Helsinki.FI (Patric M Stickler) writes:

>From: stickler@klaava.Helsinki.FI (Patric M Stickler)  
>Subject: Transistor substitution question  
>Date: 20 Oct 1993 09:58:58 +0200  
>I blew the final in my QRP tranceiver (a MRF476), but can't find an exact  
>replacement for it here in Finland. I could order a replacement from  
>the States, but I happen to have two MRF475's. Does anyone know if I  
>can substitute a 475 for the 476. The only component catalog I've  
>looked at show them as fairly similar transistors, but with the 475  
>with a higher output rating (?).

>  
>Any suggestions would be greatly appreciated.

>  
>  
>////////////////////////////////////  
> Patrick M. Stickler OH2LUV, KC4YYY The comments contained herein  
> WSOY - Information Systems Division do not necessarily reflect the  
> Helsinki, FINLAND (psti@wsoy.fi) official views of my employer.  
>////////////////////////////////////  
>

The MRF475 is a 12W (PEP) NPN output device, the MRF476 is an NPN 3W device- same pin-outs, similar voltage ratings (475 VCB0 is 48V, 476 is 36V). If a single ended application- then it looks like a 475 will easily replace a 476. In a push-pull circuit- to maintain balance; both devices should be replaced.

73, Drew, VK3XU.

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Date: 21 Oct 93 16:31:03 GMT  
From: auratek!epacyna@uunet.uu.net  
Subject: Transistor substitution question  
To: ham-homebrew@ucsd.edu

> The MRF475 is a 12W (PEP) NPN output device, the MRF476 is an NPN 3W  
> device- same pin-outs, similar voltage ratings (475 VCB0 is 48V, 476 is  
> 36V). If a single ended application- then it looks like a 475 will  
> easily replace a 476.  
>  
> 73, Drew, VK3XU.

Probably not.

The power gain, base and collector impedances are different. The amount of drive available to ths stage will most likely not be sufficient to overcome these differences.

73

Ed W1AAZ

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Date: 21 Oct 93 16:19:06 GMT  
From: auratek!epacyna@uunet.uu.net  
Subject: Transistor substitution question  
To: ham-homebrew@ucsd.edu

In addition to having higher power dissipation, the MRF475 has different base, collector impedances and power gain compared to the MRF476.

A company called NTE offers a replacement line of parts and widely distributes through electronics retail chains. their part number NTE235 would be a suitable replacement.

73

Ed W1AAZ

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End of Ham-Homebrew Digest V93 #80

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